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TECHNOLOGY

The Space Router is an internetworking IP (Internet Protocol) Router which utilizes hardware based encryption (IPSec) and compression techniques to deliver broadband data over a wireline or wireless data network. Ultimately, the router will be miniaturized and radiation hardened for use in space networks.

COMMERCIAL APPLICATION

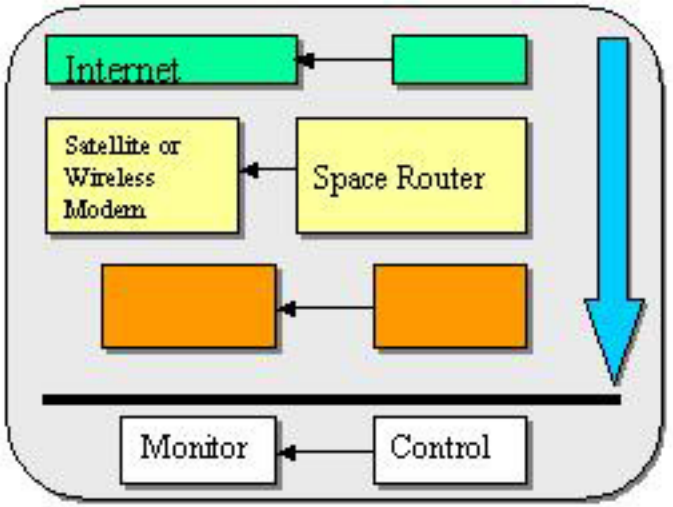
◆ The commercial applications for the Space Router include any data networking environment that can benefit from the use of compression and encryption to remotely access the Internet.

◆ Currently the Space Router is being integrated into the wireless data communications market to serve as a "last mile" solution for rural and outlying America. The Space Router, when used with a Bluestreams high data rate wireless modem, can deliver up to 6 Mbps of data up to 6 miles from a PCS cellular tower. The main application is for high speed access to the Internet where other broadband data access methods are not available or are cost prohibitive.

SOCIAL / ECONOMIC BENEFIT

◆ The Space Router is being utilized to bridge the "Digital Divide." The technology will allow for high speed Internet access in rural and outlying areas that have no alternative means to receive high-speed access. Small to medium sized businesses will be on equal footing with the metropolitan communities with regard to the availability of information.

◆ The economic opportunities are unlimited with regard to market size and uses of high speed wireless access to the Internet.



Space Router Block Diagram

NASA APPLICATIONS

◆ The Space Router was developed to support NASA's Technologies for Space Internet Services(TSIS)initiative. The Space Router was designed to control space assets allowing real time monitoring and control of data on the space craft from the Internet.

◆ The router is currently designed to transmit up to 10 Mbps of data over satellite modems.

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